



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,213	05/11/2001	Donald H. Lester	539/40	6362

7590

03/27/2003

T. Peige Wise
Adams, Schwartz & Evans, P.A.
2180 Two First Union Center
Charlotte, NC 28282

EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,213

Applicant(s)

LESTER ET AL.

Examiner

Jenna-Leigh Befumo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 11-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 – 10, drawn to a loop forming material, classified in class 442, subclass 352.
 - II. Claims 11 – 14, drawn to hook and loop fastener made with the loop forming material, classified in class 24, subclass 442.
 - III. Claims 15 – 16, drawn to a method of making a loop forming material, classified in class 156, subclass 272.2.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a cleaning sheet or a liquid acquisition layer in an absorbent article and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
3. Inventions III and Invention I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as

Art Unit: 1771

claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the continuous layer of filaments can be formed by arranging a number of spinnerets side-by-side and collecting the extruding filaments, instead of opening and deregistering a tow to form the nonwoven material.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with T. Peige Wise on February 28, 2003 a provisional election was made without traverse to prosecute the invention of Group I, claims 1 – 10.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 11 – 16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

7. The drawings are objected to because Figure 3 is described in the specification as being the loop forming material with a network of bonding points and Figure 4 is described as being the loop forming material with a network of hexagonal lines (page 4, paragraphs 26 – 27).

However, Figure 3 is shown as having the hexagonal lines and Figure 4 is shown as having the

Art Unit: 1771

point bonds. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

8. The disclosure is objected to because of the following informalities: various locations in the specification recite rational numbers with a comma instead of a decimal. For example 0,3 instead of 0.3. And on page 6, paragraph 39 it appears that Applicant used a decimal where there should be a comma, when stating the “tow can range from 40.000 to 1000,000”.

Appropriate correction is required.

Claim Objections

9. Claims 1 and 10 are objected to because of the following informalities: The Applicant has used a comma instead of the period when reciting the thickness of the material. Appropriate correction is required.

10. Claim 8 is objected to because of the following informalities: the term “polyolefine” is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1 – 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1771

13. In claim 1, the thickness of the material is said to range from “0,1” mm to “5 3 mm”. It is unclear what the upper endpoint of this range should be. Should the upper limit be 5 mm, 3 mm, or 5.3 mm? In the specification and other similar claims the Applicant limits the upper limit to 3 mm. For purposes of examination, the upper thickness value is 3 mm. Claims 2 – 9 are rejected due to their dependency on claim 1.

14. Claim 9 contains the trademark/trade name Fiberfill. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe polyester fibers and, accordingly, the identification/description is indefinite.

15. For purposes of examination, the term “Fiberfill” is defined as filaments made from polyester.

16. For purposes of examination the term “bees nest structure” in claim 5 is defined as the honeycomb structure shown in Figure 3.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1771

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 1 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (EP 1 095 763 A1).

Tanaka et al. discloses a composite sheet having a base layer and a surface layer comprised of continuous fibers extending along the length of the base layer (paragraph 5). The fibers are attached to the backing layer by a plurality of attaching lines at set intervals (paragraph 6). The fibers are bonded by heat and pressure (column 3, lines 38 – 39). The fibers can be polyethylene, polypropylene, nylon, polyester and others (column 4, lines 52 – 54). The fibers have a basis weight of 20 – 500 g/m² and are preferably crimped (column 5, lines 3 – 10). As shown in the Figures the fibers are bonded at regular continuous and discontinuous patterns.

Even though Tanaka et al. fails to teach the thickness of the nonwoven material, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed thickness, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). One of ordinary skill of the art would be motivated to choose a enough fibers on the backing layer so that the cleaning material will have easily scrub and clean surfaces due to the texture of the fibers. While at the same time one would want the layer to be as thin as possible to save money by adding the least amount of fibers needed. Thus, claims 1 – 4 and 6 – 10 are rejected.

Further, it would have been obvious to one of ordinary skill in the art to choose various bonding patterns, including a honeycomb pattern, since it has been held to be within the general skill of a worker in the art to select a known material (bonding design) on the basis of its

Art Unit: 1771

suitability for the intended use. *In re Leshin*, 125 USPQ 416. Tanaka et al. demonstrates the fabric can have various bonding patterns. Therefore, it would have been obvious to one of ordinary skill in the art to change the bonding pattern to modify the texture and bulk of the nonwoven material. Therefore, claim5 is rejected.

19. Claims 1 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roxendal et al. (6,417,427).

Roxendal et al. discloses a layer of continuous fibers, so-called tow, which is bonded together in points, lines, or spots in a bonding pattern and utilized as a liquid acquisition layer or a topsheet layer in an absorbent article (abstract). The continuous fibers are made from suitable thermoplastic fibers such as polyamide and polyester (column 5, lines 43 – 48). Also, the fibers are preferably crimped or curled to create an open and lofty structure (column 5, lines 25 – 30). The fibers can be bonded together in various patterns and configurations by ultrasonic welding or thermal bonding (column 4, lines 46 – 55). The pattern can vary within wide limits (column 4, lines 66 – 67). The fibers can be bonded in such a way to create different thickness in the nonwoven material (column 5, lines 15 – 16). Finally, the material can range in bulk density from 10 – 1000 g/m² or 5 – 500 g/m², depending on the end use of the material (column 5, line 64 – column 6, lines 10).

While Roxendal et al. discloses that the nonwoven material can have different thickness Roxendal et al. fails to teach the range of thickness which can be used. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed thickness, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, as set forth above. One of ordinary skill in the art would be motivated to make the

Art Unit: 1771

material thin so that the absorbent article does not become bulky, and so that the liquid will be able to easily travel through the nonwoven material. Additionally, when the material is used as a topsheet, one would desire the layer to be thin and open so that the layer will feel comfortable against the skin of the user. Therefore, claims 1 – 4 and 6 – 9 are rejected.

Finally, it would have been obvious to one of ordinary skill in the art to use a honeycomb bonding pattern since Roxendal et al. fails to limit the bonding patterns and says that a wide variety of bonding pattern can be used with the nonwoven material. Thus, claim 5 is rejected.

20. Claims 1 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCA Hygiene Products (EP 0 937 792 A1) in view of Roxendal et al.

EP 0 937 792 discloses a fibrous product comprising a layer of continuous fibers, so called tow, bonded together in points, spots, or lines forming a bonding pattern (column 4 lines 25 – 28). The bonding is achieved by ultrasonic welding or thermal bonding (column 4, lines 31 – 33). The fibers are thermoplastic materials such as polyolefins, polyamides, or polyester (column 4, lines 36 – 37). The fibers are preferably crimped or curled (column 5, lines 25 – 30). The bonding pattern can vary widely (column 4, lines 44 – 50). And the layer can be bonded in a way which creates a material with different thickness in different parts of the material (column 5, lines 1 – 6). The fibrous material can be laminated to a nonwoven layer or a plastic film layer (column 7, lines 6 – 10). The fabric can be used in absorbent articles (abstract).

EP 0 937 792 fails to teach the density of the nonwoven fabric. The features of Roxendal et al. have been set forth above. Roxendal et al. is drawn to a material made from continuous, crimped filaments bonded together. Roxendal et al. discloses that when using these material is absorbent articles the fabric should have a density of 5 – 100 g/m². Therefore, it would have been obvious to one of ordinary skill in the art to use a density of 5 – 100 g/m² in the nonwoven

Art Unit: 1771

material taught in EP 0 937 792 since Roxendal et al. discloses that materials with this range of basis weight are effective in absorbent products.

While EP 0 937 792 discloses that the nonwoven material can have different thickness, EP 0 937 792 fails to teach the range of thickness which can be used. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed thickness, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, as set forth above. One of ordinary skill in the art would be motivated to make the material thin so that the absorbent article does not become bulky, and so that the liquid will be able to easily travel through the nonwoven material. Additionally, when the material is used as a topsheet, one would desire the layer to be thin and open so that the layer will feel comfortable against the skin of the user. Therefore, claims 1 – 4 and 6 – 10 are rejected.

Finally, it would have been obvious to one of ordinary skill in the art to use a honeycomb bonding pattern since EP 0 937 792 fails to limit the bonding patterns and says that a wide variety of bonding pattern can be used with the nonwoven material. Thus, claim 5 is rejected.

21. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roxendal et al. in view of EP 0 937 792.

The features of Roxendal et al. and EP 0 937 792 have been set forth above. Roxendal et al. fails to teach laminating the fibrous material to a backing layer. EP 0 937 792 is drawn to a continuous, crimped filament material which is thermally bonded together. EP 0 937 792 discloses the fibrous material can be laminated to a breathable or perforated plastic film or nonwoven material (column 7, lines 6 – 10. Also, EP 0 937 792 teaches that the nonwoven backing layer can be added to control the flow of liquid and prevent rewetting of liquid towards

Art Unit: 1771

the skin of the wearer (column 7, lines 13 – 17). Therefore, it would have been obvious to one of ordinary skill in the art to laminate a backing layer as taught by EP 0 937 792 to the fibrous material of Roxendal et al. to control the flow of liquid and prevent rewetting of liquid towards the skin of the wearer. Therefore, claim 10 is rejected.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ellis et al. (4,188,436) is drawn to fibrous articles made by point bonding oriented fibers together.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (9:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo
March 22, 2003



ELIZABETH M. COLE
PRIMARY EXAMINER